

FIG. 1

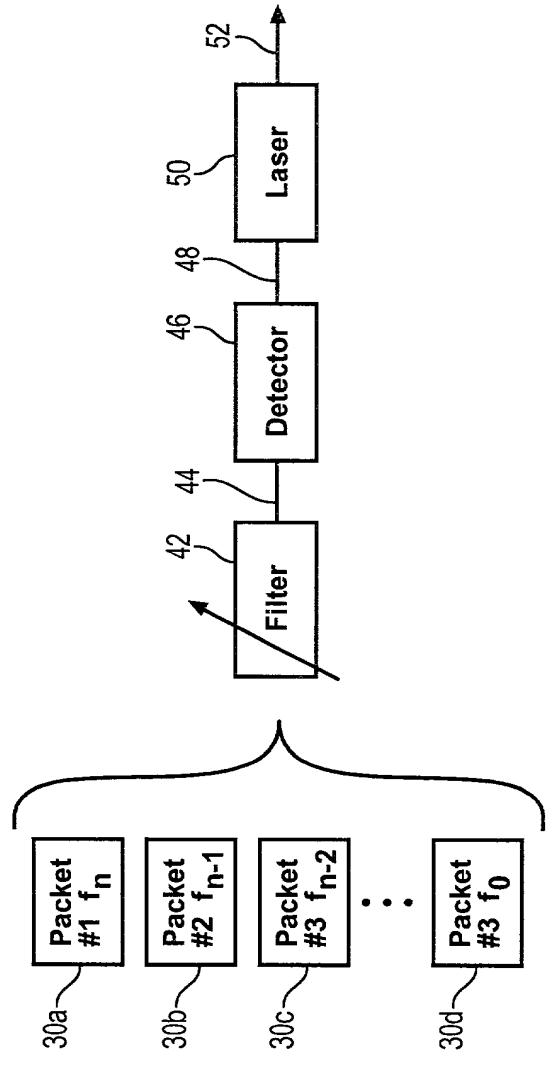


FIG. 2

FIG. 3

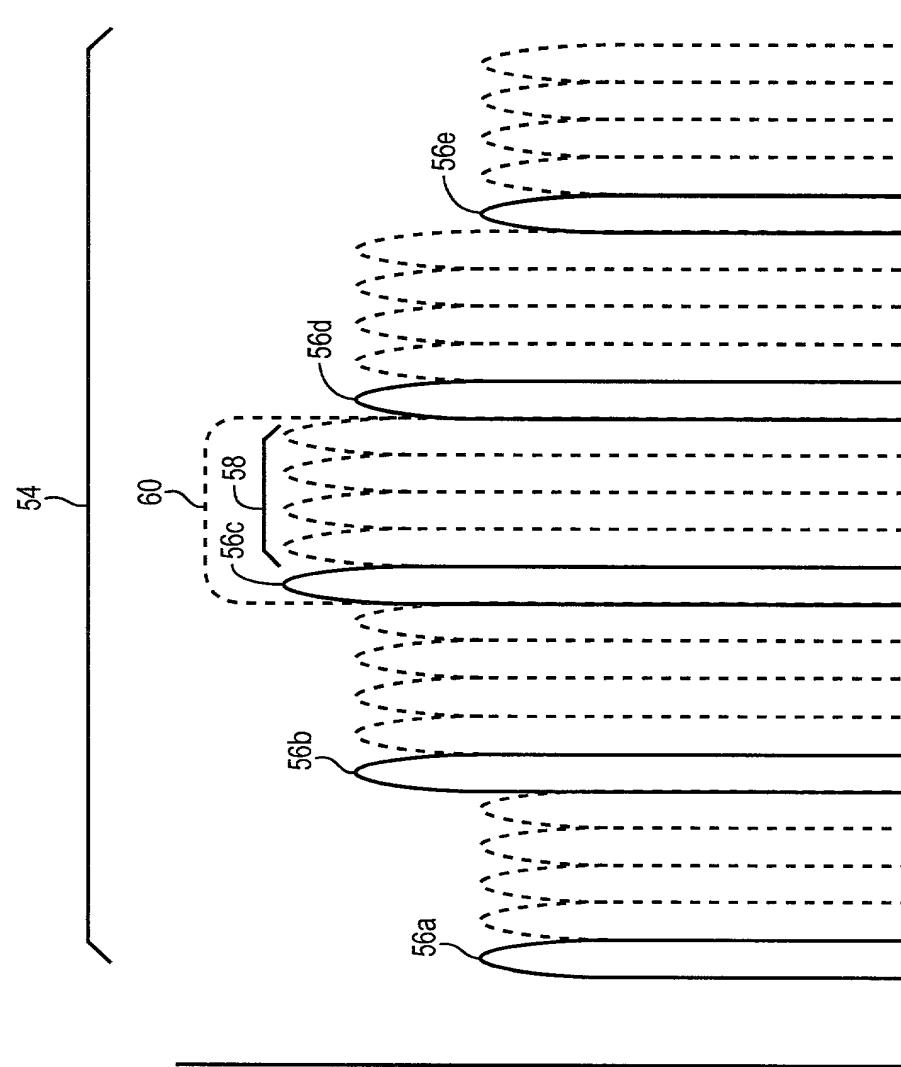


FIG. 4

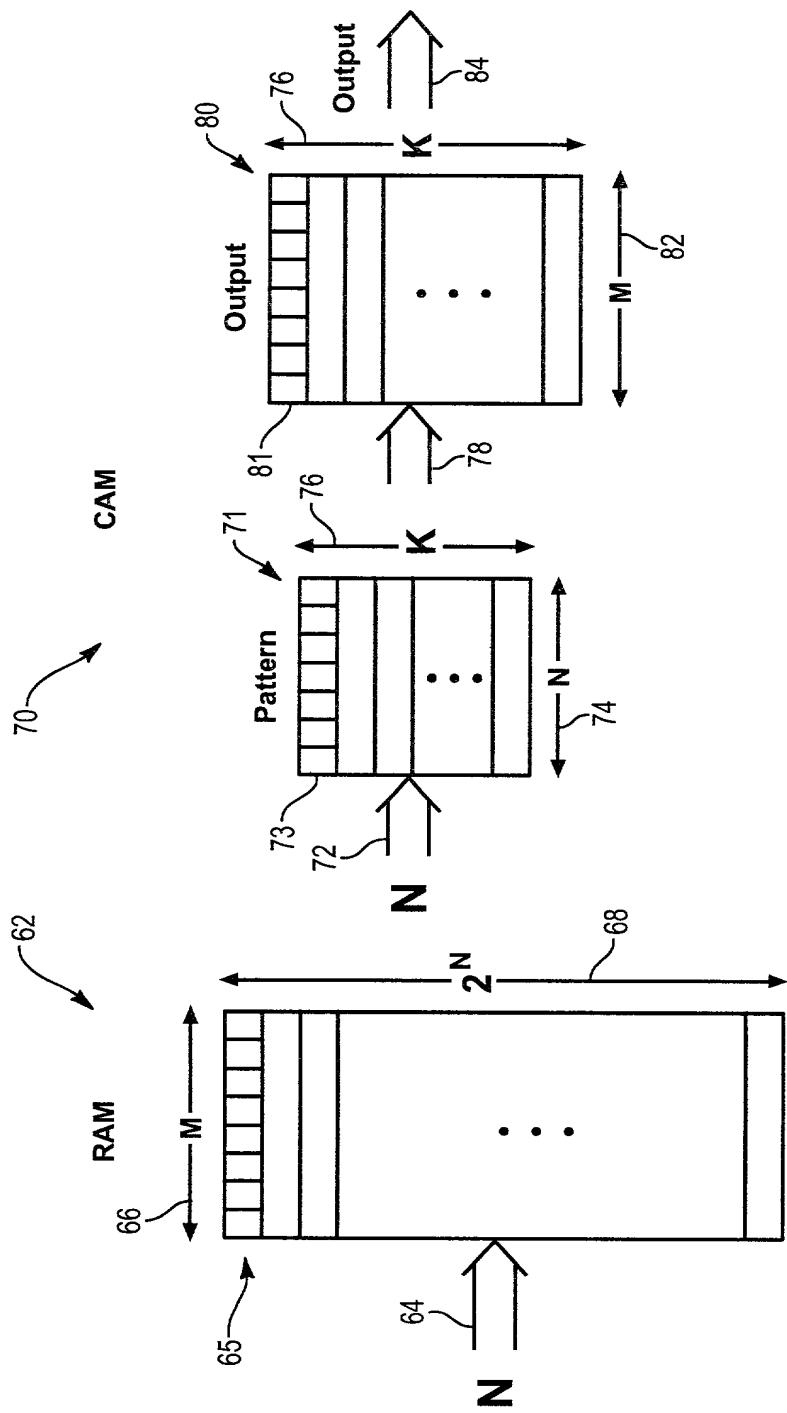


FIG. 5

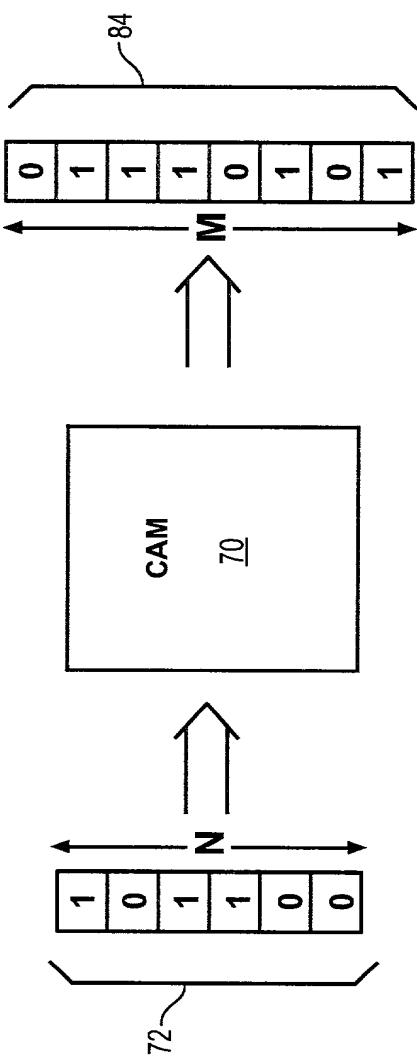
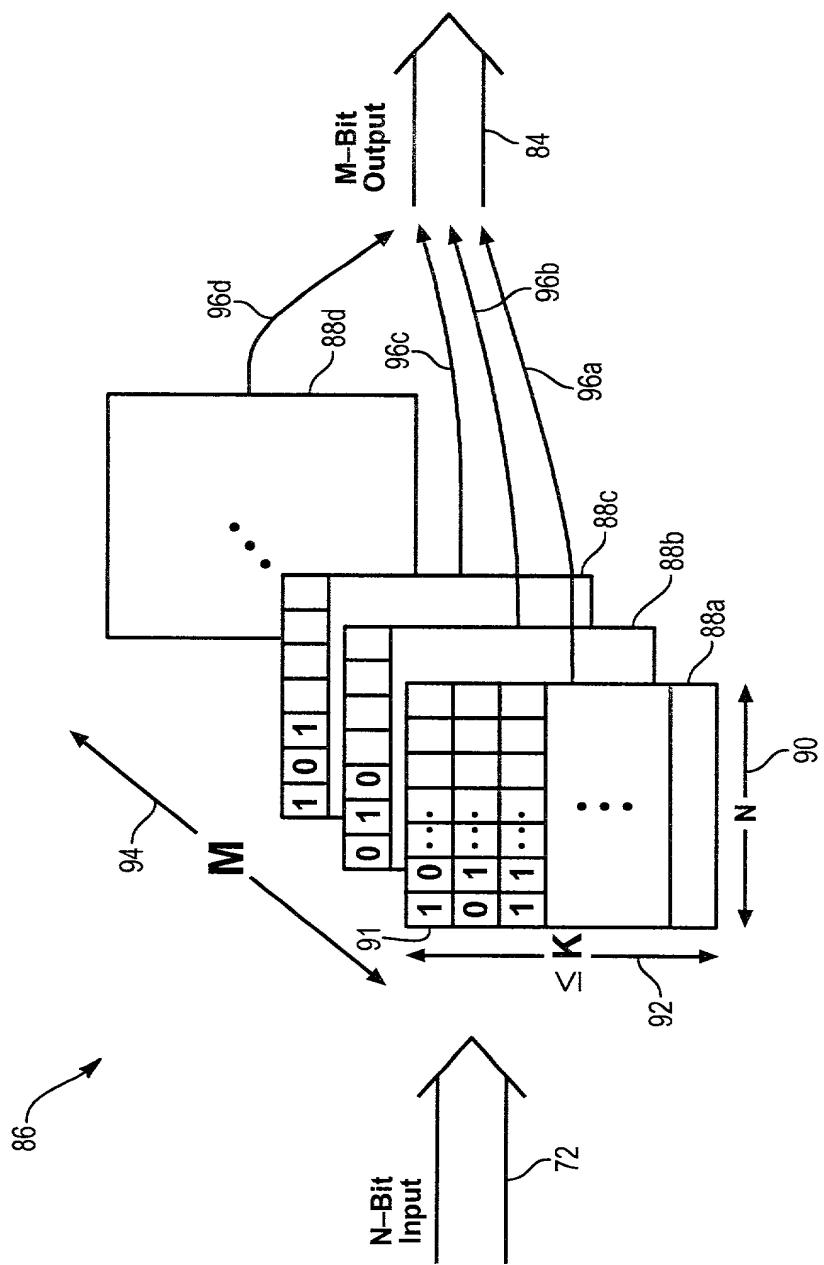
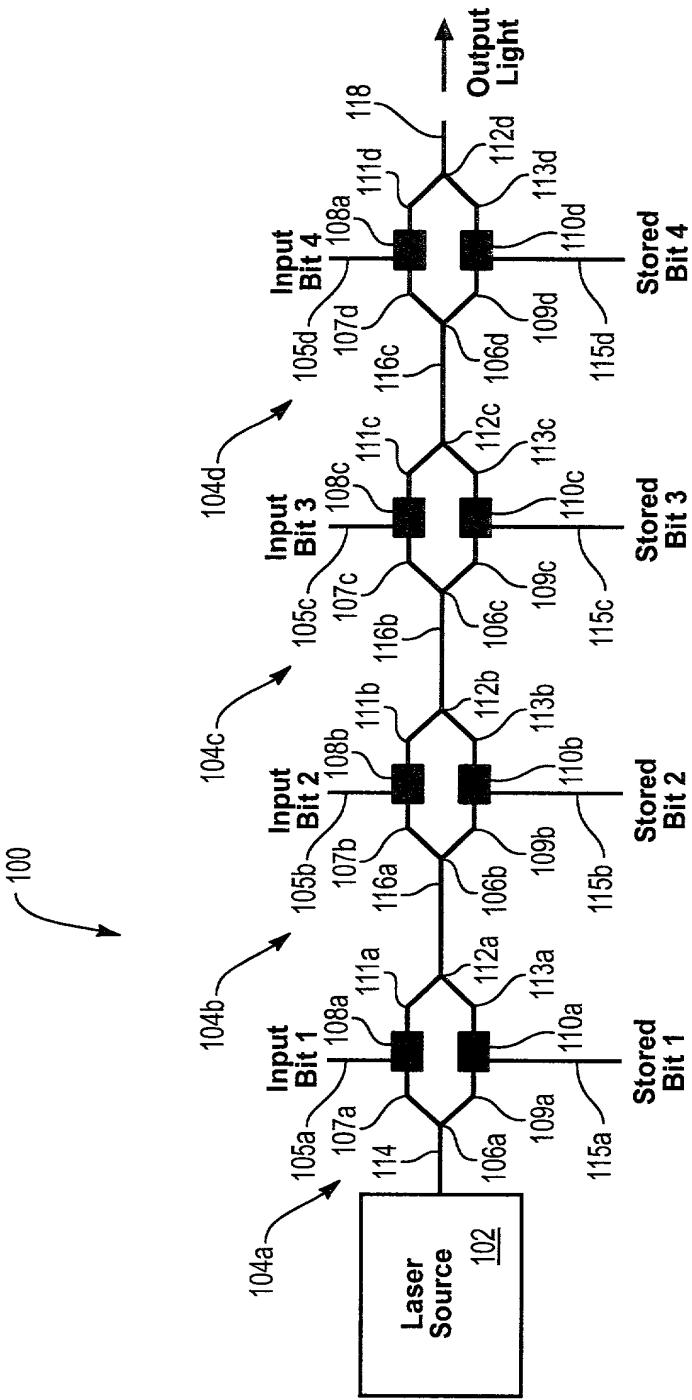


FIG. 6





**Use of Mach – Zehnder Modulators
to Match Input Patterns**

FIG. 7

FIG. 8

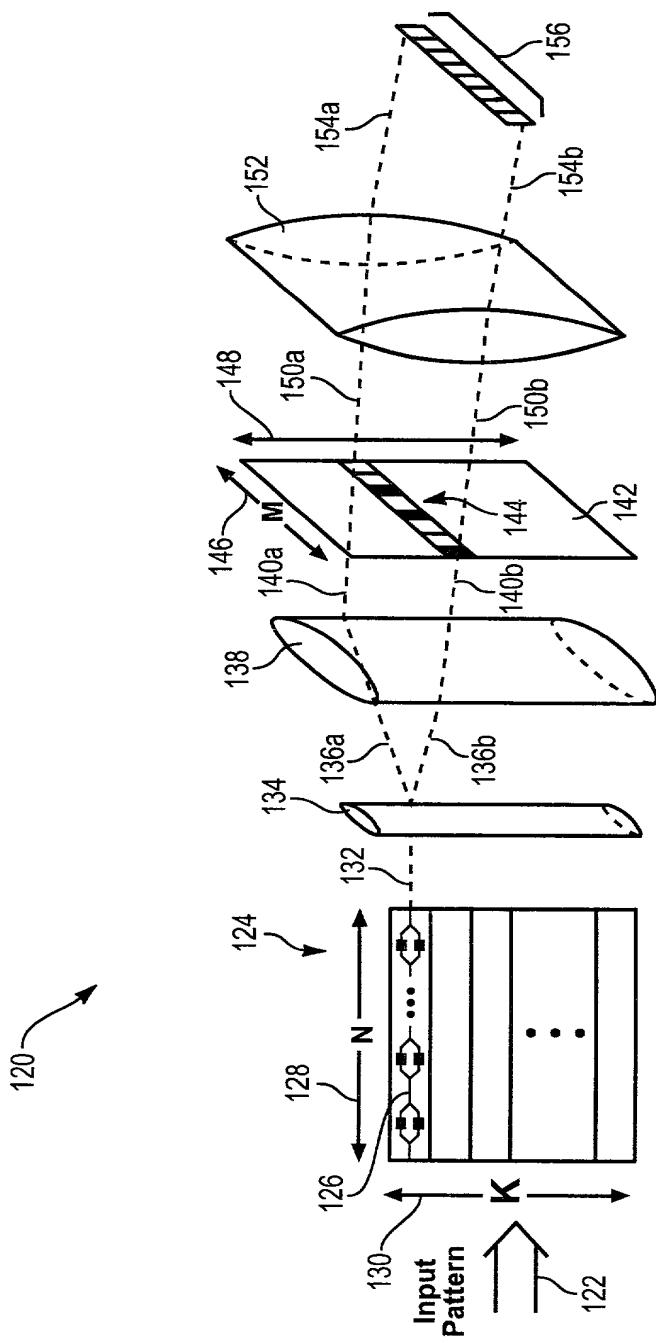
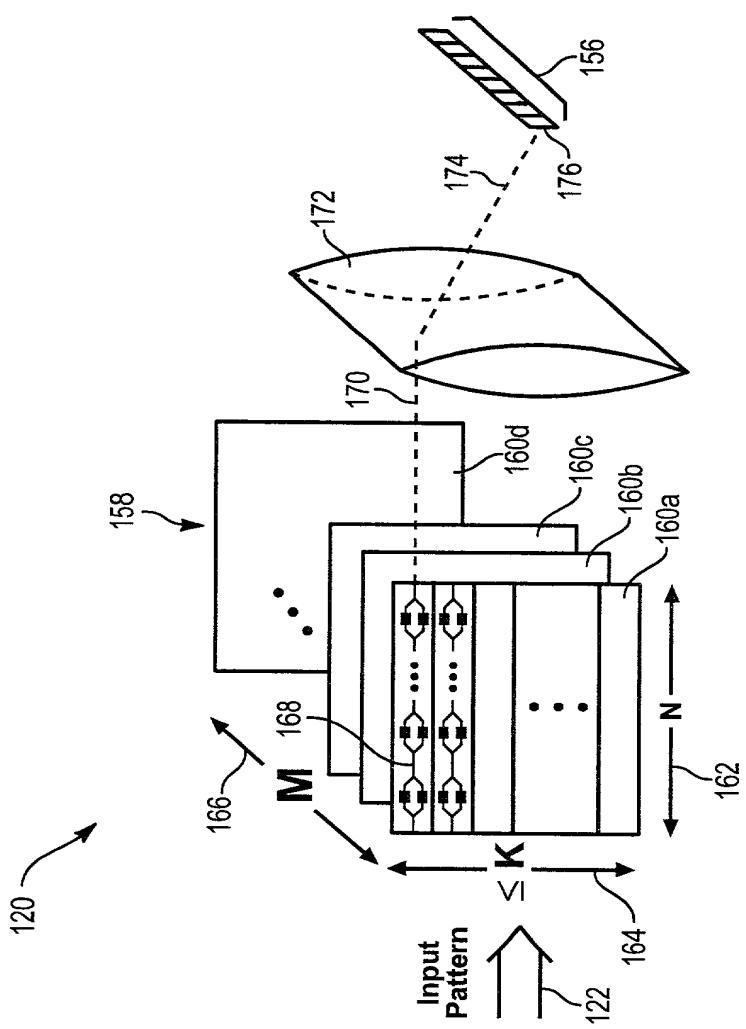


FIG. 9



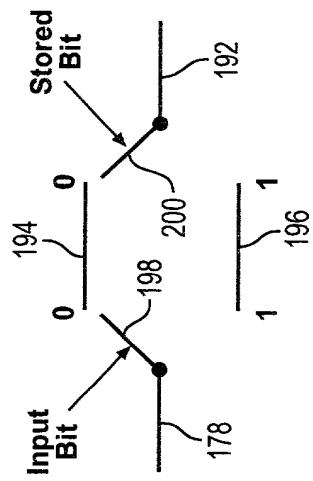
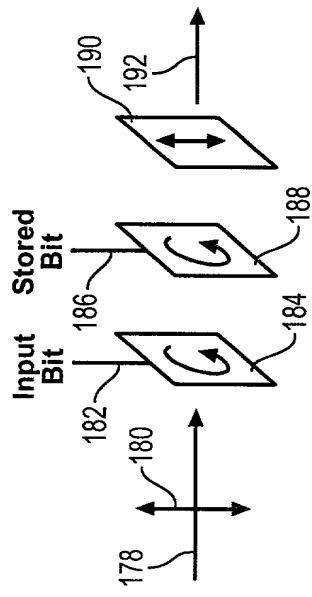


FIG. 10A

FIG. 10B

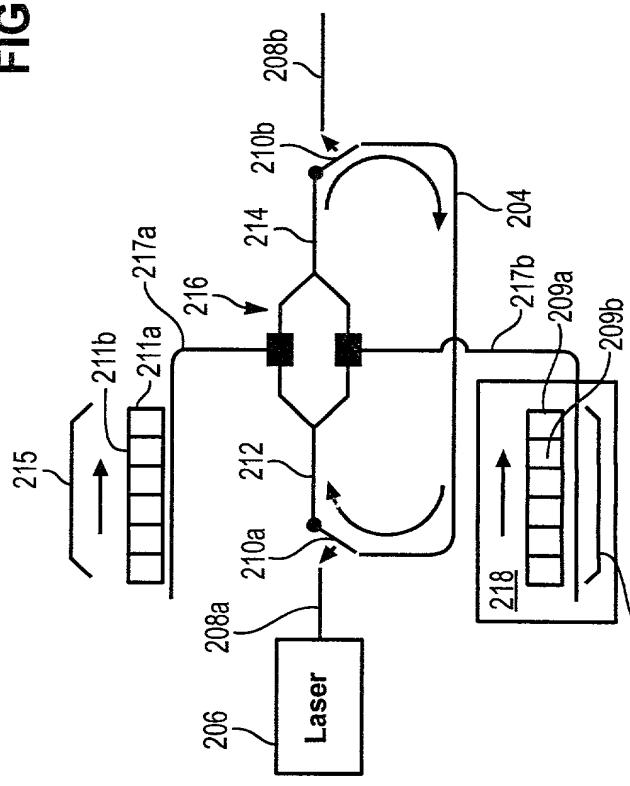


FIG. 10C

213

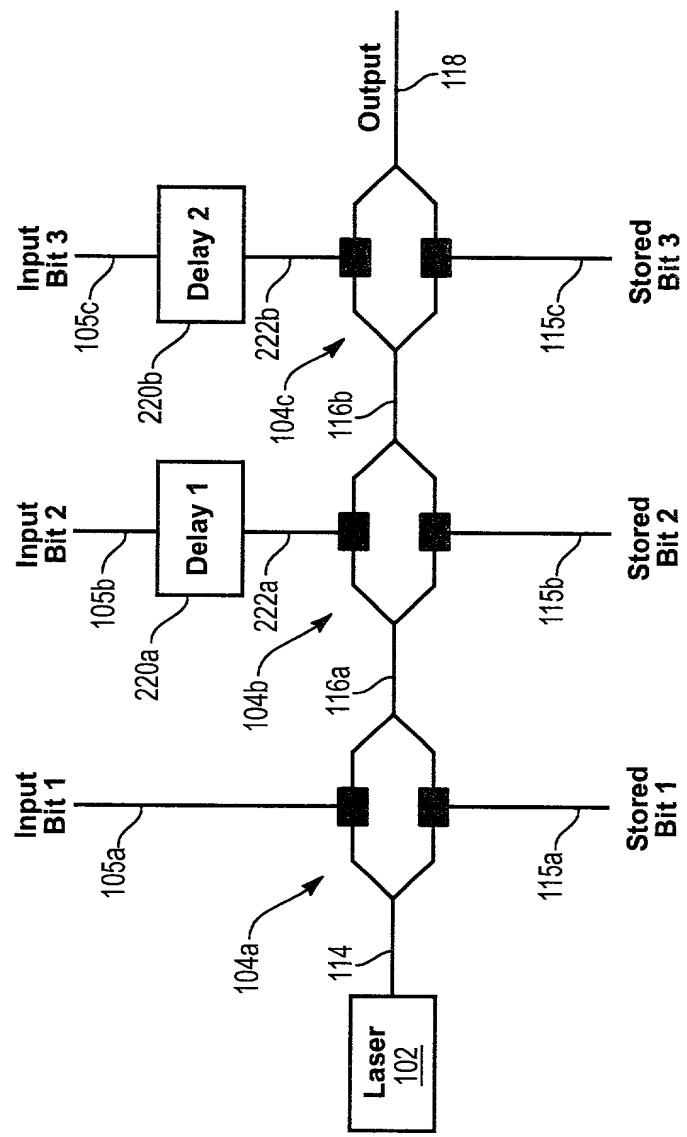


FIG. 11